

NEW RECORDS OF THE RARE GREEN-THIGHED FROG. *Memoirs of the Queensland Museum* 33(1): 348, 1993. — The Green-thighed Frog (*Litoria brevipalmata*) is a mysterious frog, populations of which apparently suddenly appear and disappear at a locality—sometimes the 'absences' are for many years (Tyler & Davies, 1985). These disappearances, however, do not appear to be part of the phenomenon of the 'disappearing frogs' (sensu Czechura & Ingram, 1991) because the species is still extant.

Until recently, the Green-thighed Frog was known from only three locations in Queensland. McDonald (1974) collected a specimen at Crows Nest National Park (NP 629: 27°15'S, 152°06'E) and another from Ravensbourne National Park (NP 492: 27°21'S, 152°12'E). Four years later, the species was collected near Jimna (26°39'S, 152°27'E) (Czechura, 1978) and in 1983 Chris Corben collected two specimens (Queensland Museum [QM] J42134, 42135) also near Jimna. All these records are from montane country.

Recently the senior author collected two male Green-thighed Frogs alongside Woogaroo Creek near Wacol, Brisbane (27°36'S, 152°54'E). These are the first coastal records for this frog in Queensland and add to the frog fauna of the Brisbane area. These records are reported here. Frog names follow Ingram et al. (1993).

First collection, 21 November 1992

At Woogaroo Creek near Wacol, heavy rain, with lightning, began falling at about 4.30pm and by 5.00pm there were radio reports of local flooding. Rain then reduced to a steady light fall with intermittent heavier showers. Observations began at about 8.00pm at a large L-shaped depression ('Ric's Ditch'), some 40m in length, alongside Woogaroo Creek and some 30m from the main creek-line. From previous experience, this depression became an ephemeral pool after good rain. On the day before, considerable rain had fallen in the afternoon and evening but not enough to produce free-standing water. By contrast, the rainfall of the 21st resulted in 85cm of water at the deepest point of the depression.

Amongst the extremely loud chorus of a large number of frogs, an unfamiliar call was heard. This proved to belong to a male *L. brevipalmata*, which was immediately captured (QM J56813). Several more calling males were observed but not collected and, judging from their calls, about 20 males were present at the site; no females were observed. Typical calling sites were in leaf litter about 0.5–0.9m from the water's edge. No Green-thighed Frogs were found away from the depression.

The following species of frogs were also noted: *Limnodynastes ornatus*, *L. peronii*, *Litoria caerulea*, *L. f. lax*, *L. gracilentia*, *L. rubella*, *Adelotus brevis* and *Mixophyes fasciolatus*. Curiously, although the Cane Toad (*Bufo marinus*) was seen well away from the site on a nearby sealed road, none was heard calling or seen in the depression despite what appeared to be ideal breeding conditions.

The vegetation surrounding Ric's Ditch is open dry sclerophyll forest with a sparse, predominately acacia understorey and a ground cover of exotic herbs and grasses. Closer to the creekline there is a heavy infestation of Chinese Elm (*Celtis sinensis*), Camphor Laurel (*Cinnamomum camphora*), a dense understorey of Bush Lanata (*Lantana camara*) and a variety of native species that form depauperate, dry rainforest.

No frogs were observed at the site on the two following nights (22, 23 November), although calls of *Adelotus brevis* and *Lim-*

nodynastes peronii were heard. Within ten days, there was no follow-up rain and the depression became completely dry — all tadpoles apparently perishing.

From 21 November 1992 to 5 January 1993, some rain fell intermittently but not enough to produce any significant frog activity. However, on some occasions these falls were accompanied by, or quickly succeeded by, strong breezes and it is possible the accompanying noise hid the sounds of calling frogs. From 1 January 1993, rainfall was recorded near Ric's Ditch. On the evening of 4 January 1993, a very brief storm produced 0.6mm and on the next afternoon a more substantial storm resulted in 30mm. At Ric's Ditch, 30mm was insufficient to produce free-standing water. Apart from a brief call from a Naked Treefrog (*Litoria rubella*), the only active caller was the Red-backed Broodfrog (*Pseudophryne coriacea*), with about 30 frogs that called from small, natural tunnels in very porous substrate.

Second collection, 6 January 1993

In the late afternoon, a vigorous electrical storm resulted in a fall of 48.5mm and, by 8.00pm, a loud chorus of frogs came from Ric's Ditch. About a dozen Green-thighed Frogs were calling and another male was collected (QM J57285). The same species of frogs noted on 21 November 1992 were recorded again and Cane Toads were also absent.

The next day was overcast with occasional light rain. Very light rain was falling at about 7.30pm when Ric's Ditch was revisited. There were about twice as many males of Green-thighed Frogs calling compared to the night before and several of these were much closer to the water, with one about 10 cm from shallow water. As before, no females were observed.

An immediate visit was made to the neighbouring Six Mile Creek some 8km distant and observations were made at several sites. A slightly different frog fauna was recorded. *Litoria nasuta* and *Crinia parvignifera* were numerous in open grassy areas. In a melaleuca swamp, there were *Limnodynastes terraereginae* and *Litoria dentata*. In the Bracken Fern (*Pteridium esculentum*) the Dusky Gungan (*Uperoleia fusca*) was recorded. However, despite considerable searching over a wide area, the Green-thighed Frog was not found.

Since 6 January, until now (22 May 1993), the Green-thighed Frog has not been met with at Woogaroo Creek, despite repeated visits.

Literature cited

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